Attorney Reference Number 5673-66690 EXPRESS MAIL LABEL NO. EV339203081US DATE OF DEPOSIT: August 22, 2003

In the claims:

Claims 1-87 (Canceled).

Please add the following new claims:

- --88. (New) A therapeutic hapten-carrier conjugate of formula A-B, wherein:
- (a) A is at least one hapten molecule selected from the group consisting of cocaine, cocaine derivatives and cocaine metabolites;
- (b) B is a carrier containing at least one T-cell epitope; wherein the therapeutic hapten-carrier conjugate is capable of eliciting anti-hapten antibodies when administered to a mammal, and wherein the anti-hapten antibodies are capable of binding and neutralizing the hapten molecule.
- 89. (New) A therapeutic hapten-carrier conjugate according to claim 88 wherein A is selected from the group consisting of cocaine, norcocaine, benzoyl ecgonine and ecgonine methyl ester.
- 90. (New) A therapeutic hapten-carrier conjugate according to claim 88 wherein B is selected from the group consisting of cholera toxin B (CTB), diphtheria toxin, tetanus toxoid, pertussis toxin, ricin-B subunit, abrina lectin, sweet-pea lectin, retrovirus nucleoprotein (retroNP), rabies ribo-nucleoprotein (rabies RNP), Tobacco Mosaic Virus, and vesicular stomatitis virus nucleocapsid protein (VSV-N).
- 91. (New) A method of treating drug addiction to cocaine in a mammal, comprising administering to the mammal a therapeutically effective amount of a hapten-carrier conjugate according to claim 88.

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- 92. (New) A composition comprising:
- (a) a therapeutic hapten-carrier conjugate comprising: at least one hapten molecule conjugated to at least one T-cell epitope-containing carrier, wherein the therapeutic hapten-carrier conjugate is capable of eliciting anti-hapten antibodies when administered to a mammal, wherein the anti-hapten antibodies are capable of binding and neutralizing the hapten molecule, and wherein the hapten molecule is cocaine, a cocaine metabolite, or a cocaine derivative; and
 - (b) a pharmacologically acceptable excipient.
- 93. (New) A therapeutic hapten-carrier conjugate according to claim 92 wherein the hapten molecule is selected from the group consisting of cocaine, norcocaine, benzoyl ecgonine and ecgonine methyl ester.
- 94. (New) A composition according to claim 93 wherein the T-cell epitope-containing carrier is selected from the group consisting of: (i) cholera toxin B (CTB), (ii) diphtheria toxin, (iii) tetanus toxoid, (iv) pertussis toxin, (v) ricin-B subunit, (vi) abrina lectin, (vii) sweet-pea lectin, (viii) retrovirus nucleoprotein (retroNP), (ix) rabies ribo-nucleoprotein (rabies RNP), (x) Tobacco Mosaic Virus, (xi) vesicular stomatitis virus-nucleocapsid protein (VSV-N), and (xii) analogs and derivatives of (i)-(xi).
- 95. (New) A method of treating drug addiction to cocaine in a mammal, comprising administering to the mammal a therapeutically effective amount of a composition according to claim 92.

derivatives thereof;

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96. (New) A therapeutic hapten-protein conjugate of formula A-B, wherein:

A comprises at least one hapten group derived from nicotine or a metabolite thereof; and B is a protein-containing carrier comprising at least one T cell epitope selected from the group consisting of bacterial products, viral subunits, lectins, allergens, antigenic fragments of allergens, malarial antigens, artificial multi-antigenic peptides, and modifications, analogs and

said therapeutic hapten-protein conjugate being immunogenic and capable of eliciting anti-nicotine antibodies when administered to a mammal.

- 97. (New) A therapeutic hapten-protein conjugate according to claim 96, wherein said protein-containing carrier comprises a bacterial toxin or toxoid.
- 98. (New) A method of treating drug addiction to nicotine in a mammal, comprising: administering to a subject of treatment an immunogenic hapten-protein conjugate of formula A-B wherein:

A comprises at least one hapten group derived from nicotine or a metabolite thereof; and B is a protein-containing carrier comprising at least one T cell epitope selected from the group consisting of bacterial products, viral subunits, lectins, allergens, antigenic fragments of allergens, malarial antigens, artificial multi-antigenic peptides, and modifications and derivatives thereof;

thereby to elicit anti-nicotine antibodies in said subject.

99. (New) A method according to claim 98, wherein said protein-containing carrier comprises a bacterial toxin or toxoid.--